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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

X-1054 US

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on March 9, 2006

Signature

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Julie Matthews

Application Number

10/082,490

Filed

02-22-2002

First Named Inventor

Warren E. Cory

Art Unit

2631

Examiner

Freshteh N.
Aghdam

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)☐

attorney or agent of record.

Registration number

☒

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

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Telephone number

March 9, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

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*Total of _____ forms are submitted.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant/Appellant: Warren E. Cory
Assignee: Xilinx, Inc.
Title: Channel Bonding Control Logic Architecture
Serial No.: 10/082,490 Filing Date: 02/22/2002
Examiner: Freshteh N. Aghdam Art Unit: 2631
Docket No.: X-1054 US Conf. No.: 3728

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PRE-APPEAL CONFERENCE BRIEF

This Brief is submitted for the Pre-appeal Conference requested in the Notice of Appeal with which this Brief is submitted.

Grounds of Rejection

Claims 1-4 and 9-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lippett et al., U.S. Patent No. 6,667,993 ("Lippett"), in view of Cotton et al., U.S. Patent No. 5,870,441 ("Cotton").

Argument

The rejection of Claims 1-4 and 9-12 should be withdrawn because the Examiner has not established a *prima facie* case of obviousness of the claims under 35 U.S.C. § 103(a) over Lippett, in view of Cotton.

A *prima facie* case of obviousness has not been established because all the limitations are not shown to be taught or suggested by the Lippett-Cotton combination, and a proper motivation for modifying Lippett with the teachings of Cotton has not

been provided. In particular, Lippett and Cotton are non-analogous art and cannot be combined in any intelligible manner. Further, even if it were possible to combine Lippett and Cotton in some fashion, the combination fails to teach or suggest at least the limitation that each second level transceiver is controlled by one of the plurality of first level transceivers.

Claim 1

Claim 1 includes limitations relating to a plurality of second level transceivers each being controlled by one of a plurality of first level transceivers. As admitted by the Examiner, Lippett does not teach or suggest each second level transceiver being controlled by one of the first level transceivers. In fact, the cited portions of Lippett merely describes a single master transmitter controlling a plurality of slave transmitters (transmitters 400 of Fig. 5) and a single master receiver controlling a plurality of slave receivers (receivers 700 of Fig. 7). All of the slave transmitters are controlled by a master transmitter 400(0) and all of the slave receivers are controlled by a master receiver 700(0). Thus, all of the transmitters and receivers in Lippett are controlled by a respective master, and there is no second level of transceivers each controlled by a first level transceiver.

The Examiner offers Cotton for teaching "each of the plurality of transceivers can be selected as either the master transceiver, one of the first level transceivers or one of the second level transceivers since the master buffer can be switched to a slave buffer and vice versa." See Final Office Action at page 3, lines 3-6. However, none of the cited sections of Cotton, or any other section of Cotton, appear to have any relevance to transceivers at all. Moreover, Cotton does not teach that a master buffer can be switched to a slave buffer, and even if it did, the mere fact that a master buffer can be switched to a slave buffer does not suggest each of a plurality of second level transceivers being controlled by a first level transceiver.

Cotton, in fact, describes a distributed clocking system, as might be used in a distributed digital telephone switching network, the system being fault tolerant. In Cotton's system, clocks are distributed throughout the system and are ranked based on their stability and accuracy, and the highest ranking (i.e., best) clock is designated

the master clock for synchronizing timing. In some embodiments of Cotton, up to 3 master clocks may be designated. Other clocks are designated as backup clocks and are “slaves” to the master clock in that they are frequency locked to an external clock (which may be the master clock). If the master clock fails, one of the backup clocks may assume the role of the master clock. See, e.g., Cotton at col. 2, line 56 – col. 3, line 7; col. 6, line 35 – col. 9, line 37; and Fig. 4D-1. Thus, Cotton describes an arrangement for a hierarchy of clock signals that is made fault-tolerant by having a pool of backup clocks ready in case of a failure in a master clock.

Thus Cotton relates to the art of clocking, and in particular to distributed clocking systems, whereas Lippett relates to communication channels. Thus, Cotton is non-analogous art to Lippett, and it would not have been obvious to modify Lippett with the teachings of Cotton, as suggested by the Examiner. In fact, the distributed clock teachings of Cotton appear to be entirely irrelevant to the transmitters and receivers taught in Lippett. Furthermore, it would be impossible to combine Lippett and Cotton at all, since they relate to completely different technologies.

Moreover, as noted above, Cotton does not suggest transceivers at all, and in fact the term “transceiver” is never even mentioned in Cotton. Furthermore, even if Cotton’s clocks could somehow be mapped to transceivers, there clearly is no teaching of a plurality of first level clocks, each controlled by a master clock, and a plurality of second level clocks, each controlled by one of the first level clocks. Cotton merely states that various clocks can be rated based on their accuracy, that the most accurate clock can be selected for use, and that one of the other clocks can replace the selected clock in the event of a failure. Appellant fails to see how this clocking arrangement bears any relevance to the system for coordinating channel bonding operations recited in Claim 1. As one of skill in the art would readily recognize, channel bonding refers to the use of multiple transceivers in parallel to increase the speed of I/O, and the process of aligning those transceivers (see, e.g., Specification at pages 1-2, ¶[0003]-[0004]).

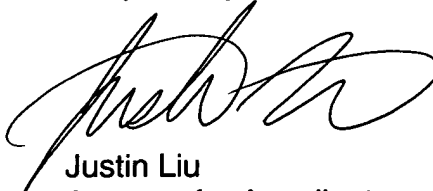
Claim 4

Claim 4 includes limitations relating to each transceiver containing at least one buffer for channel bonding operations. The Examiner cites Cotton for teaching these features. However, the cited portion of Cotton is merely part of the "Brief Description of Drawings" section that briefly describes Figs. 5B-9 of Cotton, none of which appear to show or depict any kind of buffer. As noted above, Cotton relates to a hierarchical clocking arrangement, and does not teach or suggest channel bonding. Finally, Cotton actually teaches away from the use of a buffer even in its clocking arrangement by stating: "It is a further object of the invention to provide a clocking system that does not require . . . elastic buffers." Cotton at col. 2, lines 27-29. Thus, it is clear that the use of buffers in any capacity is not taught in Cotton, and thus a *prima facie* case of obviousness has not been established with respect to Claim 4.

Conclusion

In view of the above, Appellant submits that the rejections are clearly improper, the claimed invention is patentable, and that the rejections of Claims 1-4 and 9-12 should be reversed. Appellant respectfully requests reversal of the rejections as applied to the appealed claims and allowance of the entire application.

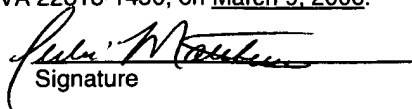
Respectfully submitted,



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Julie Matthews
Name


Signature